

## REMARKS

Claims 1-31, 33, 34, 36-51, and 53-54 are pending in the application. Claims 21-25, 39, 40, 46-51 and 53 are withdrawn from consideration.

Claims 26-31, 33-38, and 41-45 are allowed.

Claims 10-12 and 14-15 are objected to, but would be allowable if rewritten in independent form.

Withdrawn claim 39 has been amended to remove the objection to claims 39 and 40.

Claims 1-3, 5-9, 13, 16-20 and 54 stand rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Pat. No. 5,815,579 to Boyden. The applicant respectfully traverses the rejection for the following reasons.

Claim 1 requires a duct with a particular widthwise to heightwise dimensional relationship of not more than three to one. The Examiner previously acknowledged that Boyden fails to teach this claimed relationship. Now, suddenly, the Examiner has determined that Boyden discloses such a relationship. The Examiner's explanation of how Boyden teaches this relationship is not understood at all, as all examples in Boyden clearly teach a duct with a larger ratio, with a minimum of approximately 5:1 shown in

Fig. 5. The Examiner has identified Fig. 16 as teaching a duct with a dimensional relationship of not more than three to one, but in Fig. 16, *there is no duct*. The transducers 302, 304 are mounted on a “platform” 306. Thus, in Fig. 16 what is shown is a ductless embodiment. How does this teach or suggest the dimensional relationship of the claimed ducts?

Further, the Examiner still has provided no support for her statement of motivation. Even though requested in the last reply, the Examiner has not provided the answer to where is it “known to construct speaker systems of any suitable dimensional ratio for obtaining a desirable placement of the system and the promotion of comfort and fit to the user?” Boyden, according to measurements made on the paper patent, teaches no less than an approximately five to one ratio (Fig. 5) and up to an approximately twenty to one ratio (Figs. 6-8), significantly larger ratios than the outer bounds of the ratio claimed. Boyden does not support any ratio, and certainly no art is cited for the proposition that “any suitable dimensional ratio” can be used in speaker systems for garments. No other art is cited for audio ducts of different dimensions within a garment.

The ratios of Boyden and the claimed invention are so different because Boyden teaches a low profile design, whereas the claimed invention seeks a duct with significant cross-sectional area to enhance audio properties. Furthermore, there is no indication in Boyden that the widthwise to heightwise dimension has relevance to comfort and fit. Moreover, even if such were indicated, the ducts in accord with larger ratios (as shown by Boyden) are adapted to more closely fit the user. The claimed ratio is contrary to such

teaching, with low ratios (e.g., one to one round cross-section, and up to maximum of three to one) which would not conform as well to the user compared to Boyden and thus fail to be satisfied by the Examiner's stated motivation. Thus, Boyden and the prior art as whole fail to teach or suggest the desirability of the claimed dimensional restriction on the duct. "To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). In view of the above, claim 1 is not obvious over Boyden.

Referring to claim 2, the Examiner states that Boyden discloses the first duct is adapted to flex without pinching off the first duct chamber. There is no indication in Fig. 2 whether the embodiment shown in curved or flexed. Further, neither of the textual references provided by the Examiner are at all related to the claimed limitation. The locations in Boyden cited by the Examiner (col. 5, lines 24-34, col. 7, lines 4-13, and col. 13, lines 61-63) plainly fail to teach suggest that any of Boyden's disclosed embodiments can be flexed without pinching the chamber. All that is stated is that the enclosures have "sufficient flexibility that they can be worn on the body in comfort." Where is the statement that in view of such flexibility and comfort the enclosures will not be pinched off? Thus, the Examiner has failed to make out a prima facie rejection of claim 2 as well.

Referring to claims 3 and 9, the Examiner acknowledges that the first duct does not have a substantially round cross-section. However, the Examiner states that Boyden teaches adding filler and takes official notice that it is known to include enough filler for insulation purposes such that a round cross-section is produced, and finds in view thereof

that the invention would have been obvious. The applicant respectfully traverses this conclusion.

There is no teaching or suggestion to include filler for insulation purposes in the Boyden ducts. Moreover, while it may be known to provide garments with insulation for warmth, such is not taught or suggested with respect to a duct in communication with a sound transducer. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Where is the suggestion to add filler to the Boyden ducts to provide them with a round cross-section?

Furthermore, the applicant is not aware of garment ducts which are filled with insulation so as to provide a “round cross-section”. Official notice unsupported by documentary evidence should only be taken by the examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known. MPEP 2144.03(A). The applicant previously requested documentary evidence of the facts asserted by the official notice and the Examiner has failed to provide such support. Therefore, it is respectfully requested that the Examiner remove this unsupported rejection of the claims.

At this point, the applicant wishes to note that throughout the above handled rejections and some of the rejections which follow, the Examiner has attempted to make

prima facie cases of obviousness by heavy reliance on official notice. The Examiner is reminded that, in accord with MPEP 2144.03:

In limited circumstances, it is appropriate for an examiner to take official notice of facts not in the record or to rely on “common knowledge” in making a rejection, however such rejections should be judiciously applied. (emphasis added)

It is inappropriate for the Examiner to use the Boyden reference, which fails to teach or suggest the claims, in combination with official notice of ostensible facts or legal conclusions as a replacement for making a proper prima facie case of obviousness using documented prior art.

Claim 54 sets forth a *modular* speaker personal wearable speaker system attachable to a garment, the system including ducts and sound transducers, wherein “said ducts are adapted to be interchangeably coupled to the garment, and said transducers are adapted to be interchangeably coupled to said ducts.” The Examiner has taken the position that because in Boyden various alternate configurations are shown, the transducers are “interchangeably coupled” to the ducts. The applicant disagrees with this interpretation of the claim language for the reasons discussed in the prior reply. Nevertheless, in order to come to some agreement, the applicant has amended claim 54 to state that the transducers are “removably coupled” to the ducts. This is in distinction from Boyden in which the transducers are fixed within a respective enclosure, regardless of the embodiment described by Boyden. Clearly, the transducers are not removably coupled to the ducts, and no suggestion therefor is provided in Boyden. In Boyden, all the embodiments have static transducer configurations.

For the reasons advanced above, the claims are not obvious in view of Boyden.

In light of all of the above, it is submitted that the claims are in order for allowance, and prompt allowance is earnestly requested. Should any issues remain outstanding, the Examiner is invited to call the undersigned attorney of record so that the case may proceed expeditiously to allowance.

Respectfully submitted,



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